

DOCKET NO. 108430.025D
Serial No. 10/634,330
Response to Office Action dated June 29, 2004

PATENT

Remarks

Claims 1 and 3-8 are in the case.

Rejections Under 35 U.S.C. § 102

In paragraph 2 of the Office Action, claims 1 and 6-8 were rejected under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent 2000-164552 ("Tanakata et al."). Regarding claim 1, Tanakata et al. is cited as teaching a "method and device for substrate processing comprising the steps of positioning a semiconductor W in a process tank 12, introducing a mixture of ozone and water via a sparger plate 14 and valve 54. Note the sparger is used to increase the flow velocity across the wafer while the wafer is submerged in DI water and ozone."

The rejection of claim 1 over Tanakata et al. is improper because Tanakata et al. does not teach, disclose, or suggest the elements for which it is cited in the Office Action.

Claim 1 requires the step of "introducing a mixture of ozone and deionized water to the process tank via a sparger plate at an increased flow velocity across said wafer while said wafer is submerged in said deionized water and ozone." While the Office Action contends that Tanakata et al. teaches using the sparger plate 14 to increase flow velocity across the wafers, a review of the reference reveals no such teaching. While it is true that Tanakata et al. teaches using delivery pipe 14 to introduce ozonated water to the tank 12, there is absolutely no mention or suggestion that the delivery pipe 14 increases the flow velocity of the ozonated water. Moreover, the Office Action itself fails to identify where in Tanakata et al. is it taught that delivery pipe 14 increases flow velocity across the wafers. In rejecting claim 1, the Office Action merely concludes that the delivery pipe 14 increases the flow velocity. There is no support in Tanakata et al. for this conclusion. In fact, there is no detailed description in Tanakata

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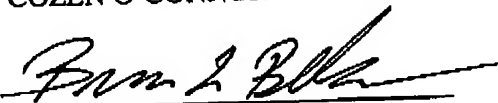
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et al. regarding the exact design or functioning of the delivery pipe 14, except that the delivery pipe 14 supplies ozonated water to the tank 12. Surely this can be done without increasing the velocity of the fluid flow, for example, by providing an open ended pipe. Thus, the rejection of claim 1 over Tanakata, et al is improper and must be withdrawn.

Because claims 3-8 depend on claim 1, and because the none of the other references are combinable with Tanakata et al. to supply the deficiency, the rejections of these claims should also be withdrawn.

It is believed that all grounds of rejection have been traversed or obviated, and that none of the references, either alone or in combination, teach or suggest the claimed invention. It is requested that all of the rejections be withdrawn and that the claims be allowed.

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